

**Amendment to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

1. (Currently Amended): A measuring device for non-invasively measuring levels of constituents in blood and tissue in a living subject ~~such as a human or animal~~, said measuring device comprising:

- B1
- (a) a polychromatic light source that emits a broad spectrum of light in the near infrared range and adjacent visible light;
  - (b) a part receptor shaped for receiving a part of said subject, said part receptor being located relative to said light source so that when a part of said subject is placed in the part receptor, said light source can be activated and light from said light source can be directed onto said part;
  - (c) a light receptor for collecting a continuum of wavelengths over said broad spectrum after said light has been directed onto said part;
  - (d) a dispersion ~~means~~ element coupled to said light receptor for dispersing ~~said collected light collected by said light receptor~~ into a dispersed spectrum of component wavelengths ~~of said collected light~~;
  - (e) a photodetector coupled to said dispersion ~~means~~ element for taking absorbance measurements from said dispersed spectrum and producing a measurement signal;

- (f) a communications interface connectable to an external computer for communicating said measurement signal to said external computer[[:]], and
- (g) a power interface connectable to an external stabilized power source.

2. (Currently Amended) The device ~~in~~ of claim 1, wherein[[:]] said polychromatic light source is connected to ~~the external stabilized power source through~~ said power interface.

3. (Currently Amended) The device ~~in~~ of claim 1, further comprising said external computer, ~~wherein said device is provided in combination with such said external computer, and~~ wherein said external computer controls at least one function of said compact measuring device, said computer including means for receiving said measurement signal.


B / 4. (Currently Amended): The device ~~in~~ of claim 3, further comprising an analog to digital converter for converting said measurement signal into a digital measurement signal for communication to said computer.

5. (Currently Amended): The device ~~in~~ of claim 3, wherein[[:]] said external computer includes a memory element, a storage element, and a software means element for storing a plurality of said measurement signals for a plurality of measurements.

6. (Currently Amended): The device in of claim 3, wherein[[,]] said external computer includes a memory element, a storage element, and a software ~~means~~ element for storing, retrieving and displaying dosage information corresponding to measurement signals received by said computer from said device.

7. (Currently Amended): The device in of claim 3 13, wherein[[,]] said external stabilized power source is provided by said external computer.

8. (Currently Amended): The device in of claim 1, wherein[[,]] said part receptor is shaped to receive said part in close alignment, so as to reduce extraneous light.

 9. (Currently Amended): The device in of claim 8, wherein[[,]] said part received within said part receptor is a human finger, and the device has a housing with an opening adapted to receive a human hand.

10. (Currently Amended): The device in of claim 9, further comprising a hand support at the housing opening, said hand support being adjustable to vary the size of the opening.

11. (Currently Amended): The device in of claim 10, wherein[[,]] said hand support receives the palm of a human hand and the top of said opening is curved to generally fit the profile of a human hand across the top of the hand.

12 (New) The device of claim 1, further comprising said external stabilized power source.

13. (New) The device of claim 3, further comprising said external stabilized power source.

B1 14. (New) The device of claim 1, wherein said subject is a human or an animal.

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